ANNUAL WATER PROGRAM - 1961 - TEWAUKON

The following table shows an estimate of water levels in refuge pools at various times of the year, corresponding surface acerage and acre feet of water required to reach full pool elevation.

Month	Inches Below Spillway	Water Surf. Acres	Acre Ft. Needed to Refill 1960	1961
		1960 Key		
		Cutler Marsh		
Jan. - March	41	103	575	
April 1 - June 10	0	205		
November 5	23	140		
Nov. 26 - Dec. 31	41	103		575
		White Lake		
Jan. - March	26	147	345	
April & May	0	175		
Nov. 28 - Dec. 31	24	150		320
		Clouds Lake		
Jan. - April 10	48	98	410	
April 11 - 30	0	107		
Sept. 1	36	100		
Nov. 28	40	99		345
		Lake Tewaukon		
Jan. - April 10	36	1,000	3,085	
April 11 - Early Jul.	0	1,040		
September 1	8	1,037		
Nov. 28 - Dec. 31	17	1,033		1,540

The above tables show that water conditions in 1960 were greatly improved over those of 1959. Slightly over 4,400 acre feet of water was required to fill all pools in 1960. 1961 will require about 2,800 acre feet.

Pool summaries and recommendations are given in the following paragraphs:

Cutler Marsh. This pool was maintained at the maximum elevation allowable by water received. The water level was at spillway elevation until early June. It then gradually decreased to 22" below spillway on Oct. 28. In early November a drawdown to 41" below spillway was carried out.

The response of vegetation to this years program is as follows: Submergents began to come back prolifically. On August 1 about 20-25% of the open

water area was covered with Sago pondweed beds. This is the first time for many years that pondweed growth has been good. This pondweed growth was triggered by the freeze out of carp during the preceeding winter. We now know that submergents will flourish in this pool when held at maximum elevation, if other conditions are favorable.

Emergent vegetation has shown only little decline in growth due to the higher water levels maintained during the past four years. However, when strips were mowed in this vegetation, the combined effect of mowing and higher water levels did cause a decrease in density of the vegetation. Approximately half of this area was sprayed with Amitrol T last summer and we should again hold this pool at the highest levels possible next year so as to evaluate the effect of this dual control method.

Waterfowl use of the area remained about the same as in preceeding years. This use varied somewhat from previous years, as more feeding was noted this summer and fall. The marsh also remained attractive as a resting area as it has been in the past.

It is recommended to maintain Cutler Marsh water levels at the maximum elevation possible during 1961. A lowering of water levels next fall may be desirable if conditions are right for more mechanical control of the emergent growth. This action, if desired, will be requested next fall.

White Lake: Waterfowl use of this area was low as no food supply exists because of a heavy carp population. No control of water levels is possible at present and therefore this pool will have to seek it's own level.

Clouds Lake: Waterfowl use of this area was very good again. Submergent vegetation covered almost the entire surface. No water level control is possible.

Lake Tewaukon is 17 inches below spillway at present. Water stopped flowing over the outlet spillway about the first of July and the level gradually decreased to the present reading. Aquatic vegetation remains scarce and waterfowl use is mainly restricted to resting purposes. It is recommended that Lake Tewaukon be held at the highest possible level for next year. However, if the recreation point development begins, levels may have to be lowered 2 to 3 feet.

Water Management planned for 1961. Maintain all pools at spillway elevation, water supply permitting. It may be desirable next fall to lower Cutler Marsh for mechanical vegetation control. If funds are received for the initial development of the recreation area on the point, it may be necessary to lower Lake Tewaukon two to three feet.